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Before the  
Federal Communications Commission  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

FCC 96J-3

In the Matter Of )  
 )  
Federal-State Joint Board on )  
Universal Service Recommended )  
Decision )

CC Docket No. 96-45

**Reply Comments of the  
Rural Utilities Service**

**Introduction**

The Rural Utilities Service (RUS) has surveyed its telemedicine grant recipients to collect information requested by the Federal Communications Commission (FCC) staff to assist in implementing Section 254(h)(1)(A) of the Telecommunications Act of 1996. The results of that survey are presented hereafter, with a brief RUS analysis of those results.

In addition, RUS provides correction of its December 19, 1996, comments, and a clarification of those comments.

**The Rural Telemedicine Survey**

Using a survey instrument developed by the FCC in cooperation with RUS and other federal agencies, RUS sought information from all 45 of the telemedicine grant recipients reaching back to the program inception in 1993. Twenty-six of the grant recipients responded, for a response rate of 58 percent. Useful telecommunications data was received on 141 rural telemedicine sites. Three respondents reported telemedicine applications that are currently under construction. A copy of the 26 completed surveys is attached to these Reply Comments.

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The 26 respondents reported telecommunications bit rate usage as follows:

<u>Service Used</u>	<u>Number of Respondents</u>	<u>Percentage of Total</u>
Full T1	11	42%
1/2 T1	1	4%
1/4 T1	8	31%
ISDN (144KB)	2	8%
POTS	4	15%

Although the survey did not specifically ask why telemedicine providers chose the speeds they use, providers offered reasons. Of the 15 respondents who buy less than the T1 rate, eight volunteered that they did not choose a higher rate because of high cost, and one cited facility unavailability as the reason. Clearly, cost is the main deterrent.

Of those telemedicine providers using T1 facilities, only one out of 11 respondents stated that they could use a lower rate service without degrading the telemedicine services offered.

The survey indicates that telemedicine may be ready to move to a communications bit rate higher than T1. Of the 11 users of T1 service, seven, or 64%, cited additional advantages of using an even higher bit rate. Three respondents reported telemedicine applications that are under construction, and of these new applications, one is contemplating a DS-3 network.

Respondents reported many advantages of higher rate circuits. Carla A. Anderson of the Dakota Telemedicine System wrote “[t]he better the resolution, the better the utilization of telemedicine.” Ken Brown of the Tri-County Memorial Hospital, Whitehall, WI, wrote that “[b]etter clarity of the video image and faster speed = better consultation/diagnosis.”

Eight respondents reported distance charges for rural circuits, and examination of the monthly charge rates for other respondents showed that most paid premiums for distance that were embedded in their fixed monthly rates. In addition, one respondent reported that the state government had negotiated its telecommunications costs with providers, and one respondent was an insular telemedicine project with all service (which was POTS) provided over satellite.

Twelve of 22 respondents reported having access to internet at their rural sites. Of those 12, three reported paying long distance charges to reach that point of access.

### **Correction of December 19, 1996 Comments**

On page two of the December 19 Comments, RUS states that:

“The 900 rural telecommunications carriers that RUS finances receive over 50 percent of their gross revenue from interexchange access charges.”

This should read:

“The 900 rural telecommunications carriers that RUS finances receive *on average* over 50 percent of their gross revenue from interexchange access charges.”

On page three of the December 19 Comments, in the last paragraph, the third sentence reads:

“The percentage mentioned above could even be a variable set by the states or the USS Administrator in consideration of the quality and reliability of service the carrier provides.”

This should read:

“The *investment level* mentioned above could even be a variable set by the states or the USS Administrator in consideration of the quality and reliability of service the carrier provides.”

### **Clarification of December 19, 1996 Comments**

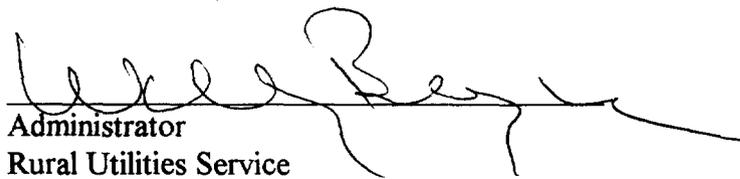
On page three of the December 19 Comments, RUS stated that the FCC should ensure that universal service support payments tie receipt of support to investment in infrastructure. RUS noted that various segments of the local exchange carrier (LEC) industry have been criticized by different parties for either investing too much or too little in rural infrastructure. Although it is implicit in RUS Comments, RUS wants to be explicit that it is RUS' position that there has not been too much investment in rural infrastructure and more investment will be needed by all rural telecommunications providers to meet the promise of the Telecommunications Act. The point RUS made in that section of the Comment is that any new support system needs to ensure that any support paid actually gets invested in rural infrastructure.

**Conclusion**

The Rural Utilities Service is pleased to provide survey results to the FCC to help in implementation of Universal Service Support for rural telemedicine. The survey shows that the T1 rate suggested for support by the Joint Board is the rate used by more rural telemedicine providers than any other, that there is migration to higher rates, and that cost is the main barrier to higher bit rate usage and greater success of telemedicine applications.

Dated:

1/9/97



Administrator  
Rural Utilities Service

Attachment



Fax Transmittal

# Regional Programs

- Area Health Education Centers Program
- Rural Hospital Program
- Delta Health Education Center Program
- Telemedicine Program

University of Arkansas for Medical Sciences

1123 South University Avenue - Suite 813

Little Rock, AR 72204

(501) 686-2590 (voice) (501) 686-2585 (fax)

Date 12-12-96 Cover page plus 5 pages transmitted

To PAM BENNETT

Organization RURAL UTILITIES SERVICE

Fax (202) 205-2921 Voice \_\_\_\_\_

From DR. ANN BYNUM

Message

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**TELEMEDICINE USER SURVEY**

1. Name of project:

ARKANSAS RURAL MedLink

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

<u>BRADLEY County Hospital</u>	<u>Warren, Arkansas</u>
<u>Stone County Medical Center</u>	<u>MT View, Arkansas</u>
<u>VAN BUREN County Memorial Hospital</u>	<u>Clinton, Arkansas</u>
<u>Fulton County Hospital</u>	<u>Salem, Arkansas</u>
<u>Cross County Hospital</u>	<u>Lynne, Arkansas</u>

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Warren Distance from city boundary: 50 mi Pine Bluff

4. Name of the project's telecommunications service provider:

Southwestern BELL

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

384 Kbps (1/4 of T-1)

6. Charges for telecommunications service:

Is there a monthly charge? No            Yes   
 If yes, how much is the charge? \$549.<sup>00</sup> /MO

2. Stone County Medical Center

City: Mt. View      Distance from City Boundary: 100 Mi Little Rock

Service Provider: Mt View Telephone Company

Charges Mt View: \$ 1500.00 / Month

3. Van Buren County Memorial Hospital

City: Clinton, AR      Distance: 65 Mi Little Rock

Service Provider: Northern Arkansas Telephone Co.

Charges Clinton: \$ ~~1700~~ \$1700 / Month

4. Fulton County Hospital

City: Salem      Distance from City Boundary: 80 Mi.

Service Provider: Century Telephone Company

Charges Salem: \$ 1200.00 / MO

5. Cross County Hospital

City: Wynne, AR      Distance from City Boundary: 50 Mi  
Memphis

Service Provider: Southwestern Bell

Charges Wynne: \$ 549.00 / MO

Is there a usage-based charge? No  Yes   
If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?  
No  Yes   
If yes, how much is the charge? \_\_\_\_\_

Was there an installation fee? No  Yes   
If yes, how much is the charge? \$6,500 includes warranty & installation

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed  Discount   
If there is a discount, how much is it? 30%

7. How does the project use telecommunications in the delivery of health care? (For example - to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

- Continuing Education and Staff Development for Rural Health care Providers
- Consumer Health Education classes (Public)
- Administrative Video Conferencing
- Credit Classes for Rural Population - BS - Medical - Graduate
- Clinical consultations
- Emergency Room consultations
- Specialty medical clinics
- Health education for K-12

8. Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if they could be completed in half the time?)

We need the bandwidth we are now using  
for clinical work & electronic diagnostic equipment.

9. What would the implications of having a greater level of bandwidth be?

Greater Percent of User Satisfaction  
↑ Use

10. Do you have e-mail? No  Yes

11. Do you have Internet access? No  Yes

If yes, do you incur long-distance charges by using it?

No  Yes

Please estimate your number of hours of internet use per month:

\_\_\_\_\_

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

Medical updates  
Research  
Grant updates  
Library users



#2

### TELEMEDICINE USER SURVEY

1. Name of project:

NORTH IDAHO COMMUNITY EDUCATION AND HEALTH INFORMATION NETWORK

2. Please list each of the project's sites:

Name of Site:

State in which it is located:

<u>Kootenai Medical Center</u>	<u>IDAHO</u>
<u>NORTH IDAHO COLLEGE</u>	<u>"</u>
<u>BOUNDARY COMMUNITY HOSPITAL</u>	<u>"</u>
<u>BOJNER GENERAL HOSPITAL</u>	<u>"</u>
<u>SHOSHONE MEDICAL CENTER</u>	<u>"</u>
<u>BENEWAH COMMUNITY HOSPITAL</u>	<u>"</u>

Please answer the following questions for each of your sites. Use additional sheets if necessary.

ALL SITES USE SAME PROVIDER, HAVE SAME TARIFF RATE

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: BOISE Distance from city boundary: 350 - 495 mi

4. Name of the project's telecommunications service provider:

AT&T

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

PRI-T1 installed - we use 384K for video consults

6. Charges for telecommunications service:

Is there a monthly charge? No  Yes

If yes, how much is the charge? ~~200~~ per site for access to PRI-T1  
\$350

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4398 P.04/07

Is there a usage-based charge? No

Yes

If yes, how much is the charge?

Eg. 7/135/hr for a point to point consult, \$22.50 for a three-way multi-point conference.

Is there a distance component (such as a per-mile fee) of the charge?

Yes

If yes, how much is the charge?

Was there an installation fee? No

Yes

If yes, how much is the charge?

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed \_\_\_\_\_ Discount

If there is a discount, how much is it?

Discount was negotiated by the Idaho STATE Department of Administration - FACILITIES SERVICES UNIT NOT AVAILABLE w/o their input for case # 7. How does the project use telecommunications in the delivery of health care? (For example -

to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

VIDEO CONSULTATIONS - Public Health Forums - HEALTH NETWORK BUSINESS MEETINGS - Continuing MEDICAL EDUCATION Courses - ALLIED HEALTH and NURSING EDUCATION

8. Could the project provide the services it is currently providing with less bandwidth? What about would a lower level of bandwidth have? (The implications of using greater or lower levels of telecommunications services are related to image transmission time. What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if they could be completed in half the time?)

384K (1/4 T-1) is the minimum acceptable bandwidth for our INTERACTIVE VIDEO NETWORK - lower bandwidth would not transmit diagnostic quality IMAGES.

9. What would the implications of having a greater level of bandwidth be?

GREATER BANDWIDTH WOULD REDUCE TRANSMISSION  
TIMES & IMPROVE IMAGE QUALITY SOMEWHAT -  
COMPRESSION ALLOWS FOR NEAR FULL-MOTION  
OVER 384K -

10. Do you have e-mail? No  Yes

11. Do you have internet access? No  Yes

If yes, do you incur long-distance charges by using it?

No  Yes

Please estimate your number of hours of internet use per month:

175<sup>+</sup>

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

ACCESS TO FEDERAL REGISTER, LIBRARY OF CONGRESS,  
NAD LIBRARY OF MEDICINE, NAD AB LIBRARY,  
STATE OF IDAHO STATUTES & CODES, COMMERCIAL  
DOCUMENT SUPPLIERS, GRANT INFORMATION, ACCESS TO  
LEGISLATORS & THEIR AIDES, LOCAL LIBRARY CATALOGS,  
LOCALLY MOUNTED CD DATABASES, LOCAL COMMUNITY  
NETWORK FOR SERVICE PROVIDERS

#3



# Arlington Municipal Hospital

### FAX COVER LETTER

NAME Blenda Martin

LOCATION USDA / RUS

PHONE (202) 720 - 0721

FAX NUMBER (202) 205 - 2921

FROM/OFFICE Lynette Froehlich

FAX NUMBER (507) 964-2941

NAME OF DOCUMENT \_\_\_\_\_

OTHER INFORMATION \_\_\_\_\_

DATE 12/13/96 TIME 4:15 pm

NUMBER OF PAGES 4 INCLUDING COVER LETTER

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CONFIDENTIALITY NOTICE - The document(s) accompanying this fax contain confidential information which is legally privileged. The information is intended only for the use of the intended recipient named above. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reliance on contents of the telecopied information, except its direct delivery to the intended recipient named above, is strictly prohibited. If you have received this fax in error, please notify us at (507) 964-2271 to arrange for the return of the original documents to us. Thank you.

*Release authorized by Lynette Froehlich  
by phone on 1/8/97.*

*Ed Cameron*

### TELEMEDICINE USER SURVEY

**1. Name of project:**

Arlington Municipal Hospital Tele-medicine

**2. Please list each of the project's sites:**

**Name of Site:**

**State in which it is located:**

Arlington Municipal Hospital

Minnesota

Abbott-Northwestern Hospital

Minnesota

Please answer the following questions for each of your sites. Use additional sheets if necessary.

**3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?**

City: Minneapolis

Distance from city boundary: 50 miles

**4. Name of the project's telecommunications service provider:**

U.S. West (94%) and Frontier (Local Co.) (6%)

**5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)**

T-1 (768 bandwidth)

**6. Charges for telecommunications service:**

Is there a monthly charge? No \_\_\_\_\_ Yes X

If yes, how much is the charge? \$866.00/\$361.00

Is there a usage-based charge? No  Yes \_\_\_\_\_  
If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?  
No \_\_\_\_\_ Yes   
If yes, how much is the charge? 47 miles. \$18.42

Was there an installation fee? No \_\_\_\_\_ Yes   
If yes, how much is the charge? \$2690

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed  Discount  per length of contract (contract 36 months)  
If there is a discount, how much is it? \_\_\_\_\_

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

- Provides Emergency Room coverage - see E.R. patients, send X-rays, EKG's and lab values.
- Educational programs for all professions.
- Administrative meetings.
- Commitment (Psych) hearings.
- Public education programming.
- Physician consultations.

8. Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if they could be completed in half the time?)

- Yes. Instead of 768 bandwidth, could use a 384 bandwidth minimum level.
- Felt the 768 bandwidth to allow better diagnosis of X-rays for image visualization.
- Need for video-conferencing.

**9. What would the implications of having a greater level of bandwidth be?**

Better visual resolution.

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10. Do you have e-mail? No  Yes \_\_\_\_\_

11. Do you have Internet access? No  Yes \_\_\_\_\_

(Local phone company does not offer)

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

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12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

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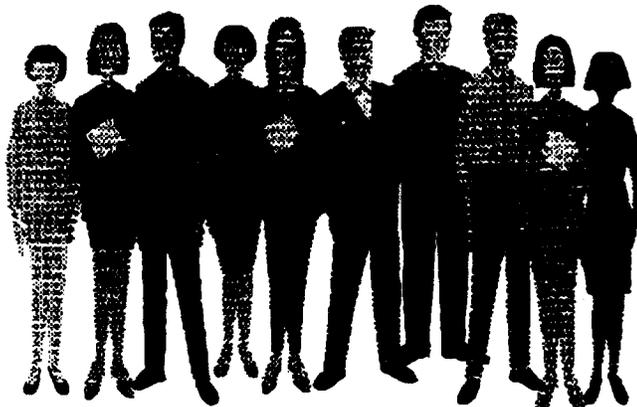
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#4

# ST. FRANCIS MEDICAL CENTER SUBSIDIARIES AND AFFILIATE SERVICES



TO: Orren E. Cameron, III DATE: 12|13|96

FAX NUMBER: 202-720-4099

FROM: William P. Gunther, Provider Network Coordinator

FAX NUMBER: (318) 327-4749

TELEPHONE NUMBER: (318) 327-7297

PAGES FAXED: 4

MESSAGES: Mr. Cameron,

Please find attached the completed FCC questionnaire  
for the Northeast Louisiana Health Network, Inc.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### TELEMEDICINE USER SURVEY

1. Name of project:

Northeast Louisiana Health Network Teleradiology Link

2. Please list each of the project's sites:

Name of Site:	State in which it is located:
<u>Columbia Medical Center</u>	<u>Louisiana</u>
<u>West Carroll Memorial</u>	<u>Louisiana</u>
<u>Jackson Point Hospital</u>	<u>Louisiana</u>
<u>Madison Parish Hospital</u>	<u>Louisiana</u>
<u>Richardson Medical Center</u>	<u>Louisiana</u>
<u>St. Francis Medical Center</u>	<u>Louisiana</u>
<u>Morehouse General Hospital</u>	<u>Louisiana</u>
<u>Franklin Medical Center</u>	<u>Louisiana</u>

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: Monroe, LA Distance from city boundary: All within 76 miles

4. Name of the project's telecommunications service provider:

Bell South

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

T-1 Frame Relay

6. Charges for telecommunications service:

Is there a monthly charge? No \_\_\_\_\_ Yes X  
If yes, how much is the charge? \_\_\_\_\_ \$733.00

Is there a usage-based charge? No  Yes \_\_\_\_\_

If yes, how much is the charge? \_\_\_\_\_

Is there a distance component (such as a per-mile fee) of the charge?

No \_\_\_\_\_ Yes

If yes, how much is the charge? Charge is based on distance from point to point

Was there an installation fee? No \_\_\_\_\_ Yes

If yes, how much is the charge? \$3,600.00

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed  Discount \_\_\_\_\_

If there is a discount, how much is it? \_\_\_\_\_

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

Project's primary focus is the transmission of Medical X-ray's from a rural primary care provider to a Tertiary Medical Center for consultation and/or final medical interpretation.

8. Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if they could be completed in half the time?)

Yes, The lower bandwidth would mean slower image transmission and possible image degradation.

SOUTHERN PROPOSALS  
FROM USDA RUE

20220529 5043459046

12-12-96 13:58 [47] #5

9. What would the implications of having a greater level of bandwidth be?

Faster transmission of the medical image  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. Do you have e-mail? No  Yes \_\_\_\_\_

11. Do you have Internet access? No  Yes \_\_\_\_\_

If yes, do you incur long-distance charges by using it?

No \_\_\_\_\_ Yes \_\_\_\_\_

Please estimate your number of hours of internet use per month:

\_\_\_\_\_

12. If you have access to the Internet, please list any purposes other than e-mail (such as accessing databases such as Lexis/Nexis)? for which you use it:

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#5



DEACONESS-BILLINGS CLINIC  
HEALTH SYSTEM

**FAX**

Date 12/16/96

Number of pages including cover sheet 2

TO: Orren E. Cameron III  
Rural Utilities Service

Donna Hemmick  
Good Samaritan Hosp. Fund.

Phone \_\_\_\_\_

Fax Phone 202-720-4099  
308-865-2933

FROM: Helma M. Closhy Armstrong  
Eastern Montana  
Telemedicine Network

Marketing and Regional Services  
2800 Tenth Avenue North  
P.O. Box 37000  
Billings, Montana 59107

Phone (406) 255-8425

Fax Phone (406) 255-8405

CC: \_\_\_\_\_

REMARKS:  Urgent  For your review  Reply ASAP  Please Comment

Helma McClosky Armstrong authorized  
release of this information by telephone call  
on 1/8/97. Ed Cameron, RUS

The information contained in this facsimile message is privileged and confidential information intended for the use of the individual or entity named above. If the reader of this message is not the intended recipient, he or she is hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone, and return the original message to us at the address on this cover sheet via the U.S. Postal Service. Thank you.



## EASTERN MONTANA TELEMEDICINE NETWORK

1. **Project Name:** Eastern Montana Telemedicine Network

2. **Name of Sites:**

Deaconess Billings Clinic Health System  
 Deaconess Behavioral Health Center  
 Eastern Montana Community Mental Health Center  
 Glendive Medical Center  
 Sidney Health Center  
 Fallon Medical Complex  
 Culstrip Medical Center  
 Roosevelt Memorial Hospital  
 Frances Mahon Deaconess Hospital  
 Montana Hospital Association

Questions 3 - 6

Please refer to attached spread sheet

7. **How does the project use telecommunications in the delivery of health care?**

The Eastern Montana Telemedicine Network is an interactive videoconferencing network that provides medical and mental health consultation services, continuing medical and higher education, administrative and telebusiness services throughout eastern Montana. Medical consultation can be provided by a full array of specialist including 24 hour a day access to the Deaconess Billings Clinic Health Systems Emergency Department.

8. **Could the Project provide the services it is currently providing with less Bandwidth?**

**Absolutely Not.** When the EMTN designed its network, we made some very difficult decision based on the economic realities of telecommunication costs. We are using the **MINIMUM** acceptable bandwidth. For many of our consultative activities such as pathology, speech pathology and neurology full T-1 service would enable us to maximize the quality of the diagnostic information received by our consultants.

9. **What would the implication of having a greater level of bandwidth be?**

As stated above, better quality of diagnostic imaging and live transmission thereby improving the diagnostic capabilities of our health care providers.

10. **Do you have e-mail?**

At the present time none of the EMTN sites except the Montana Hospital Association (MHA) and the Network hub at Deaconess Billings Clinic Health System (DBCHS) have E-Mail.

11. **Internet Access?**

All sites have access to the internet but would pay a long distance charge for those services.

DBCHS and the MHA do not pay long distance rates for internet.

### Program Office

Deaconess Medical Center  
 2800 Tenth Avenue North  
 Billings, Montana 59101  
 Ph. (406) 657-4870  
 Ph. (800) 325-1774  
 Fax (406) 657-4875

### Participating Sites

Behavioral Health Clinic  
 Billings, Montana  
 (406) 255-8550

Culstrip Medical Center  
 Culstrip, Montana  
 (406) 748-3600

Community Memorial Hospital  
 Sidney, Montana  
 (406) 482-2120

Eastern Montana Community  
 Mental Health Center  
 Miles City, Montana  
 (406) 232-0234

Fallon Medical Center  
 Baker, Montana  
 (406) 778-3331

Frances Mahon Deaconess  
 Hospital  
 Glasgow, Montana  
 (406) 228-4351

Glendive Medical Center  
 Glendive, Montana  
 (406) 365-3306

Montana Hospital  
 Association  
 Helena, Montana  
 (406) 442-1911

Roosevelt Memorial Hospital  
 & Nursing Home  
 Culbertson, Montana  
 (406) 787-6281

### Eastern Montana Telemedicine Network

Sites	Mileage	Carrier	Service	Monthly Costs	Usage	Install	Per mile Fee/Fixed Portion	Discounted
Behavioral Health	0	US West	384 kbps	\$200.00	n/a	\$ 1,200.00	\$12.04 per mile/\$104.00	Tariffed
Billings	0	US West	384 kbps	\$ 1,945.40	n/a	\$ 1,200.00	\$12.04 per mile/\$104.00	Tariffed
Colstrip	120	US West	384 kbps	\$ 934.04	n/a	\$ 1,200.00	\$12.04 per mile/\$104.00	Tariffed
Glendive	222	US West	384 kbps	\$ 1,186.66	n/a	\$ 1,200.00	\$12.04 per mile/\$104.00	Tariffed
Sidney	272	US West	384 kbps	\$ 922.00	n/a	\$ 1,200.00	\$12.04 per mile/\$104.00	Tariffed
Culbertson	309	US West	384 kbps	\$ 472.77	n/a	\$ 1,200.00	\$14.99 per mile/\$196.00	Tariffed
		Nemont		582.28				15%
Billings Dial-up		AT&T	384 kbps	486.92	\$36 per hr	\$ 600.00		36%
Helena Dial-up	*89	AT&T	384 kbps	486.92	\$36 per hr	\$ 600.00		36%
Glasgow	279	Nemont	384 kbps	815.67	n/a	\$ 1,200.00	\$15.06 per mile	15%
		Valley		815.67				15%
Baker	225	M-rivers	384 kbps	\$ 600.00	n/a	\$ 850.00		50%
		US West		\$ 167.73			\$14.99 per mile/\$196.00	Tariffed
				\$ 9,616.06		\$ 10,450.00		

Note - closest town of 50,000 to all EMTN sites is Billings

\*except Helena which is closer to Great Falls

#6

TELEMEDICINE USER SURVEY

1. Name of project: DECATUR COUNTY HOSPITAL  
LEON, IA 515-446-4242  
HEALTHNET WORKS

2. Please list each of the project's sites:

Name of Site:	State in which it is located:
<u>CRESTON H.S.</u>	<u>IA</u>
<u>CHANDLER H.S.</u>	<u>MO</u>
<u>CRESTON HOSPITAL</u>	<u>IA</u>
<u>COMST CITY H.S.</u>	<u>MO</u>
<u>CELEDA H.S.</u>	<u>IA</u>
<u>CELEDA HOSPITAL</u>	<u>IA</u>
<u>WENTON H.S.</u>	<u>IA</u>
<u>CHARITON HOSPITAL</u>	<u>IA</u>
<u>CRONVILLE H.S.</u>	<u>IA</u>
<u>MURRAY H.S.</u>	<u>IA</u>
<u>MERCER H.S.</u>	<u>IA</u>
<u>KIRKSVILLE H.S.</u>	<u>MO</u>
<u>PRINCETON H.S.</u>	<u>IA</u>

Please answer the following questions for each of your sites. Use additional sheets if necessary.

3. What is the nearest city of population equal to or greater than 50,000 in your state, and approximately how far are you from its boundary?

City: DES MOINES Distance from city boundary: 60 MI

4. Name of the project's telecommunications service provider:

GRAND RIVER MUTUAL TO ICN (Grand Communications Network)

5. Level of telecommunications service the project is currently using: (For example: voice grade, 144 Kbps (ISDN), 384 Kbps, T-1 or equivalent, or higher rate)

DS-1 & DS-3 QUOTED

6. Charges for telecommunications service:

Is there a monthly charge? No        Yes X  
If yes, how much is the charge? FIRST QUOTE DS-1 807.50 @ 1MO  
DS-3 7127.28 @ 1MO  
+ CONSTRUCTION COSTS ON DS-3

Is there a usage-based charge? No \_\_\_\_\_ Yes X  
If yes, how much is the charge? 5.00 ~~100~~ UNKNOWN FOR NON  
ICD - ICD STATE SUBSIDY

Is there a distance component (such as a per-mile fee) of the charge?  
No \_\_\_\_\_ Yes \_\_\_\_\_  
If yes, how much is the charge? UNKNOWN

Was there an installation fee? No \_\_\_\_\_ Yes X  
If yes, how much is the charge? 1096 DS-3 ~~546 DS-1~~

Is the charge the regular tariffed rate, or is there a discount from the telecommunications provider? Tariffed \_\_\_\_\_ Discount \_\_\_\_\_  
If there is a discount, how much is it? UNKNOWN

7. How does the project use telecommunications in the delivery of health care? (For example -- to send x-rays, distribute public health information, or perform video consultations. Please identify any occasional or episodic uses, such as might result from an outbreak of disease.)

VIDEO CONSULTATIONS FOR MEDICINE  
PILOT DATA DOING GROUP THERAPY  
BETWEEN 4 REMOTE SITES - 10 STUDENTS  
IN EACH SITE

WILL BEGIN DOING PARENT GROUPS FOR  
BEHAVIOR DISORDER TEENS

8. Could the project provide the services it is currently providing with less bandwidth? What effect would a lesser level of bandwidth have? (The implications of using greater or lesser levels of telecommunications services are related to image transmission time. What would be the impact if the health care activities for which you now use telecommunications took twice as long, or if they could be completed in half the time?)

MUST HAVE IMMEDIATE VOICE & VIDEO  
SYNCHRONIZATION TO MAKE GROUP  
PROCESS WORK